

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re patent application of:

Yasuomi Ooki et al.

Confirmation No. 7772

Serial No. 10/668,260

Group Art Unit: 2144

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Examiner: Bengzon, Greg C.

For: INTERNET CONNECTION SYSTEM

Commissioner for Patents

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SUBMISSION OF APPELLANT'S BRIEF UNDER 37 C.F.R. §41.37

This brief is in furtherance of the Notice of Appeal, filed in this case on February 14, 2008.

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I. REAL PARTY IN INTEREST

The real party in interest in the appeal is:

– the party named in the caption of this brief.

✓ the following party:

NEC Infrontia Corporation
2-6-1 Kitamikata, Takatsu-ku
Kawasaki-shi, Kanagawa,
JAPAN

II. RELATED APPEALS AND INTERFERENCES

With respect to other appeals, interferences or judicial proceedings that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal:

✓ there are no related appeals, interferences or judicial proceedings related to, which directly affect or may be directly affected by or have a bearing on the Board's decision in this pending Appeal.

_ these are as follows:

III. STATUS OF CLAIMS

The status of the claims in this application is as follows:

A. Total number of claims in Application

Claims in the application are:

Claims 1-17, totaling seventeen (17) claims.

B. Status of all the claims:

1. Claims cancelled: 2-6, 8, 10 and 12
2. Claims withdrawn from consideration but not cancelled: none
3. Claims pending: Claims 1, 7, 9, 11 and 13-17
4. Claims allowed: none
5. Claims rejected: Claims 1, 7, 9, 11 and 13-17

C. Claims on Appeal.

The claims on appeal are: Claims 1, 7, 9, 11 and 13-17

IV. STATUS OF AMENDMENTS

The status of amendments filed subsequent to the final rejection is as follows:

Appellant's amendment filed January 8, 2008, which is the only amendment Appellant filed on the present application after final rejection, will be entered, according to the Advisory Action mailed January 31, 2008.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention is a system having a plurality of terminals, each having a unique identifier, connected to the Internet through one or more gateways, and having the gateway or a charging server arranged to record the amount of communication band usage by each terminal and to generate a bill unique for each terminal based on the ratio of the amount of band usage recorded for the terminal's communications with the Internet to the total amount of band usage recorded for all of the terminals.

Independent claims 1, 7, 9, 11 and 13 define various example embodiments of the invention, all having the features of recording the amount of band usage by each terminal's communication with the internet, and of generating a bill unique for each terminal based on the ratio of the terminal's recorded band usage to the total amount of band usage recorded for all of the terminals.

Independent claims 1, 9 and 11 include an arrangement in which the plurality of terminals is connected to the Internet through a common gateway, with the gateway arranged to record each individual terminal's use of the Internet and arranged to generate the bill for each terminal based on the ratio of that terminal's recorded usage of the to the total recorded usage of all of the terminals. Independent claims 9 and 11 further recite example embodiments having various arrangements of wireless local area network (LAN) terminals and wireless LAN base stations.

Independent claim 7 includes an arrangement having a plurality of gateways, each connected to one of the terminals, each gateway having an access line to the Internet, with a selectable routing feature that connects terminals to the Internet through the access line having the lowest communication load.

Independent claim 13 includes an arrangement having a plurality of gateways, each connected to one of the terminals, each gateway having an access line to the Internet, with a selectable routing feature that connects

terminals to the Internet through the access line having the highest communication speed.

Independent claims 7 and 13 further include a charging server arranged to record each individual terminal's use of the Internet and to generate the bill for each terminal based on the ratio of that terminal's recorded usage of the to the total recorded usage of all of the terminals. Independent claim 13 further defines an example embodiment having a recited arrangement of wireless LAN terminals and wireless LAN base stations.

A concise explanation of the subject matter of independent claims 1, 7, 9, 11 and 13 is presented in the following five (5) tables, one table for each claim. Each table presets one element and limitation breakdown of one claim and identifies, according to page and line numbers in the Specification and/or figure and item numbers in the drawings, disclosed illustrative examples of structure meeting the claim elements and limitations. Appellant respectfully states that the tables identify only illustrative examples, and do not necessarily identify the only claim breakdown or identify the only portions, or encompass all portions of Appellant's disclosure meeting the table's recited claim elements and limitations, and that the tables are not any disclaimer of claim scope or claimable subject matter.

Claim 1	Disclosed Illustrative Example
An internet connection system, comprising:	Figs. 1-4
a plurality of terminals, each terminal located in a predetermined location,	Fig. 1 shows an example in relation to a building, with room A and room B as examples of predetermined locations, and with terminal 1A in room A and terminal 1B in room B. This example is further described in

<p>each terminal arranged to generate communications having a location identifier unique to the terminal;</p>	<p>the Specification at, for example, page 13, lines 6-18.</p> <p>Fig. 2 shows an example configuration of the example Fig. 1 terminals 1A and 1B, having an application part 111 and a communication part 112 that send a MAC address, unique to the terminal, as part of communications generated by the terminal. This arrangement of the terminals to generate communications having a location identifier unique to the terminal is described in the Specification at, for example, page 15, line 15, through page 16, line 1; and at page 16, lines 22 – 27.</p>
<p>a gateway arranged to receive the communications from the terminals and to selectively connect the terminals to the internet,</p>	<p>Fig. 3 shows one example of the gateway 2 in the Fig. 1 arrangement, arranged to receive communications from the example terminals 1A and 1B, and arranged to selectively connect the terminals to the internet. This example arrangement, and the receiving and connection, is further described in the Specification at, for example, page 13, lines 6 – 9, and at page 14, lines 17-24.</p>

<p>[the gateway] arranged to record a communication band usage for each of the terminals indicating a quantity of communications through the gateway having the unique location identifier of the terminal, and</p>	<p>Fig. 4 shows a table disclosed as stored in the Fig. 3 gateway 2, including a table 73 that records a running total of the band usage for each terminal according to its unique MAC address. The arrangement is further described in the Specification at, for example, page 16, lines 9-13.</p>
<p>arranged to generate a communication fee data unique to each terminal, the communication fee data based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals.</p>	<p>The Fig. 4 example table maintained by the gateway 2 has a table 75, storing the unique fee data generated by the gateway 2 for each terminal, based on the running ratio, stored in table 75, of bandwidth usage by the terminal to the total bandwidth usage by all of the registered terminals. The Specification at page 17, lines 12-18 further describes one example.</p>

Claim 7	Disclosed Example
An internet connection system, comprising:	Figs. 5, 6, 7 and 4
a plurality of gateways, each arranged in a predetermined location, each connected to the internet via an access line associated	Fig. 5 shows one example arrangement, having gateways 2A and 2B as a plurality of gateways, with gateway 2A arranged in room A as the

with the gateway;	example predetermined location, and gateway 2B arranged in room B as its example predetermined location, with gateway 2A connected to the internet by an associated access line A, and with gateway 2B connected to the internet by an associated access line B.
a terminal located in each of the plurality of predetermined locations, connected to the gateway, each terminal arranged to generate communications having a location identifier unique to the terminal,	In the Fig. 5 example arrangement, terminal 1A is in the example predetermined location embodied by room A, and terminal 1B is in the example predetermined location embodied by room B. This arrangement of terminals is described at, for example, page 18, lines 8-17.
wherein the plurality of gateways are arranged to detect a communication load through each of the access lines,	Fig. 6 shows an example of the gateways 2A and 2B within the Fig. 5 arrangement, having parts 221-226 that are described in the Specification as detecting the communication load through their respective access lines to the internet. An example of the detecting is described in the Specification at page 22, lines 2-15.
are arranged to compare the detected communication load of different ones	The Fig. 6 example gateways 2A and 2B are disclosed in the Specification at

<p>of the access lines and, based on the comparing, to selectively connect the terminals to the internet through the access line having a comparatively lower communication load</p>	<p>page 22, lines 16-19 as comparing the detected communication load of the different gateways' respective access lines to the internet and, based on the comparing, to select the access line having a comparatively lower communication load. Therefore, as disclosed in reference to the Fig. 5 example, (see Specification at page 22, lines 2-24), communication between terminal 1A and the internet may be through the gateway 2A, which is in the same location as terminal 1A and the internet access line A, or may be through the gateway 2B, even though the gateway 2B is in a different location than terminal 1A. The Specification at page 22, lines 2-24 describes an example operation of parts 221 – 224 in performing this selection of the access line having the comparatively lower communication load.</p>
<p>a charging server connected to the plurality of gateways,</p> <p>arranged to record a communication band usage for each of the terminals</p>	<p>Fig. 5 shows an example charging server 4 connected to the example plurality of gateways 2A and 2B.</p> <p>Fig. 7 shows an example arrangement of the Fig. 5 charging server 4, having</p>

<p>reflecting a quantity of communications between each of the terminals and the internet based on the location identifier within the communications, and</p>	<p>an authentication request/gate managing part 413 that stores a table, as shown at Fig. 4, recording a communication band usage between each of the terminals and the internet, based on the terminals' respective MAC address (which is within their communications) and a room identifier associated with the MAC address. Specification further describes an example at page 19, line 27, through page 20, line 9.</p>
<p>[the charging server] arranged to generate a communication fee data unique to each terminal, based on a ratio of the recorded communication band usage associated with the terminal to a total of the recorded communication band usage of all of the plurality of terminals</p>	<p>The charging server 4 of the Fig. 7 example arrangement includes, as described in the Specification at, for example, page 24, lines 14-20, an arrangement maintaining in its authentication request/gate managing part 413 a table 75 generating and storing a communication fee unique to each terminal based on the running ratio (described as stored in table 74) of bandwidth usage by the terminal to the total bandwidth usage by all of the registered terminals.</p>

Claim 9	Disclosed Example
An internet system, comprising:	Figs. 11, 12 and 4
a plurality of wireless LAN base stations, each located in a corresponding predetermined location;	Fig. 11 shows one example arrangement in relation to a building or condominium, having an example plurality of wireless LAN base stations gateways, labeled 12A and 12B located, respectively, in room a and room B of the building.
a wireless terminal located in each of the predetermined locations, each wireless terminal wireless LAN connected to the wireless LAN base station in the same predetermined location and wireless LAN connected to the wireless LAN base station in an adjacent predetermined location,	The Fig. 11 example arrangement includes wireless terminal 11A in room A (one of the predetermined locations), and wireless terminal 11B in room B (another of the predetermined locations). The arrangement and wireless connections are further described in the Specification at, for example, page 34, lines 4-12 and at page 37, line 26, through page 38, line 1. As described, each wireless terminal 11A and 11B is wireless LAN connected both to the wireless LAN base station in the same predetermined location (wireless terminal 11A to wireless LAN base station 12A in room A, and wireless terminal 11B to wireless LAN base

<p>wherein each terminal is arranged to generate communications having a location identifier unique to the terminal</p>	<p>station 12B in room B), and to the wireless LAN base station in the adjacent location (wireless terminal 11A in room A to wireless LAN base station 12B in room B, and wireless terminal 11B to wireless LAN base station 12A in room A. It should be noted that in the Fig. 11 example the wireless terminal 11A does not appear in the dotted line area of wireless LAN base station 12B, but is clearly described as wireless connected to the base station 12B. <i>See Specification at, for example, page 37, line 26, through page 38, line 1.</i></p> <p>Fig. 12 shows an example configuration of each of the example Fig. 11 terminals 11A and 11B, having an application part 131 and a communication control part 133 that send a MAC address, unique to the terminal, as part of communications generated by the terminal. <i>See also, Specification at, for example, page 36, lines 24-27.</i></p>
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<p>a gateway connected to the plurality of wireless LAN base stations, the gateway having an access line connected to the internet,</p>	<p>Fig. 3 shows one example of the gateway 21 in the Fig. 11 arrangement, connected to the example wireless LAN base stations 12 and 12B, the gateway 21 having an access line (not separately numbered) connected to the internet. This is also described in the Specification at page 33, lines 17-22.</p>
<p>wherein the wireless LAN base stations, wireless terminals and gateway are arranged to selectively connect each of the wireless terminals to the internet through a selectable one of the wireless LAN base station to which the wireless terminal is wireless LAN connected,</p>	<p>The arrangement and wireless connections are further described in the Specification at, for example, page 34, lines 4-12 and at page 37, line 26, through page 38, line 1. As described, each wireless terminal 11A and 11B is wireless LAN connected both to the wireless LAN base station in the same predetermined location (wireless terminal 11A to wireless LAN base station 12A in room A, and wireless terminal 11B to wireless LAN base station 12B in room B), and to the wireless LAN base station in the adjacent location (wireless terminal 11A in room A to wireless LAN base station 12B in room B, and wireless terminal 11B to wireless</p>

	LAN base station 12A in room A.
wherein the gateway is arranged to record a communication band usage for each of the terminals, identifying a quantity of communications between each of the terminals and the internet based on the unique location identifiers with the communications,	Fig. 4 shows a table disclosed as stored in the Fig. 3 gateway 21 within the Fig. 11 arrangement, including a table 73 that records a running total of the band usage for each terminal according to its unique MAC address. The arrangement is further described in the Specification at, for example, page 34, lines 13-14, and at page 36, line 21, through page 37, line 3.
and [the gateway] is arranged to generate a communication fee data unique to each of the wireless terminals, based on a ratio of the recorded communication band usage for the wireless terminal associated with the data to a total of the recorded communication band usage of all of the wireless terminals.	The Fig. 4 example table maintained by the gateway 21 has a table 75, storing the unique fee data generated by the gateway 21 for each terminal, based on the running ratio, stored in table 75, of bandwidth usage by the terminal to the total bandwidth usage by all of the registered terminals. The arrangement is further described in the Specification at, for example, page 34, lines 13-14, and at page 36, line 21, through page 37, line 3.

Claim 11	Disclosed Example
An internet connection system, comprising:	Figs. 11, 9, 12, 10, 7 and 4

<p>a plurality of wireless LAN base stations, each located in a corresponding predetermined location;</p>	<p>Fig. 11 shows one example arrangement in relation to a building or condominium, having an example plurality of wireless LAN base stations gateways, labeled 12A and 12B located, respectively, in room a and room B of the building.</p>
<p>a wireless terminal located in each of the predetermined locations,</p> <p>each wireless terminal wireless LAN connected to a sub-plurality of the wireless LAN base stations,</p> <p>one of the sub-plurality of wireless LAN base stations located in the same predetermined location as the wireless terminal and</p>	<p>The Fig. 11 example arrangement includes wireless terminal 11A in room A (one of the predetermined locations), and wireless terminal 11B in room B (another of the predetermined locations).</p> <p>The Fig. 11 wireless terminal 11A is wireless LAN connected to at least wireless LAN base station 12A, and wireless terminal 11B is wireless connected to at least wireless LAN base stations 11B and 11A. <i>See also</i>, Specification at, for example, page 34, lines 4-12 and at page 37, line 26, through page 38, line 1.</p> <p>In the Fig. 11 arrangement, wireless LAN base station 12A is located in the same room A (predetermined location) as</p>

the other of the sub-plurality of wireless LAN base stations located in a different location;	wireless terminal 11A, and l, wireless LAN base station 12A is located in the same room B (predetermined location) as wireless terminal 11B.
a common gateway connected to the plurality of wireless LAN base stations, the common gateway having an access line connected to the internet,	Fig. 11 shows one example gateway 21, connected to the example wireless LAN base stations 12A and 12B, the gateway 21 having an access line (not separately numbered) connected to the internet.
wherein the wireless LAN base stations, wireless terminals and gateway are arranged to measure a communication speed from each of the wireless terminals to the internet through each of the plurality of wireless LAN base stations to which the wireless terminal is wireless LAN connected,	The Fig. 9 example wireless terminals 11A and 11B within the Fig. 11 arrangement have an application part 131 and communication control part, which send and receive dummy data to perform a speed measurement from each of the wireless terminals to the Internet, through each of the plurality of wireless LAN base stations to which the Fig. 9 wireless terminals are connected. See Specification at, for example, page 35, line 13, through page 36, line 9.
and are arranged to selectively connectively connect the wireless	See Specification at, for example, page 36, lines 10-16.

terminals to the internet through the gateway and through the wireless LAN base station of the plurality of wireless LAN base stations having the highest measured communication speed,	
and further comprising a charging server, connected to the common gateway,	Fig. 7 shows an example separate charging server, which is an originally claimed alternative to the Fig. 11 depicted example that incorporates the functions of the charging server within the common gateway 21.
arranged to record a communication band usage for each of the terminals indicating a quantity of communications between the terminal and the internet, based on the unique location identifiers within the communications, and	The Fig. 7 charging server has an authentication request/gate managing part 413 that stores a table, as shown at Fig. 4, recording a communication band usage between each of the terminals and the internet, based on the terminals' respective MAC address (which is within their communications) and a room identifier associated with the MAC address. <i>See Specification at, for example, page 19, line 27, through page 20, line 9.</i>
arranged to generate a communication fee data unique to each of the wireless terminals,	The charging server 4 of the Fig. 7 example arrangement includes, as described in the Specification at, for

based on a ratio of the recorded communication band usage for the wireless terminal associated with the data to a total of the recorded communication band usage of all of the wireless terminals.	example, page 24, lines 14-20, an arrangement maintaining in its authentication request/gate managing part 413 a table 75 generating and storing a communication fee unique to each terminal based on the running ratio (described as stored in table 74) of bandwidth usage by the terminal to the total bandwidth usage by all of the registered terminals.
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Claim 13	Disclosed Example
An internet connection system, comprising:	Figs. 13, 9, 12, 10, 7 and 4
a plurality of wireless LAN base stations, each located in a corresponding predetermined location;	Fig. 13 shows one example arrangement in relation to a building or condominium, having a plurality of wireless LAN base stations gateways, including the wireless LAN base stations labeled 12A and 12B located, respectively, in room A and room B of the building.
a wireless terminal located in each of the predetermined locations,	The Fig. 13 example arrangement includes wireless terminal 11A in room A (one of the predetermined locations),

each wireless terminal wireless LAN connected to a sub-plurality of the wireless LAN base stations,	and wireless terminal 11B in room B (another of the predetermined locations). In the Fig. 13 arrangement, wireless terminal 11A is wireless LAN connected to at least wireless LAN base stations 12A and 12B, and wireless terminal 11B is wireless connected to at least wireless LAN base stations 11B and 11A. <i>See</i> Specification at, for example, page 39, lines 7-18.
one of the sub-plurality of wireless LAN base stations located in the same predetermined location as the wireless terminal and the other of the sub-plurality of wireless LAN base stations located in a different location,	In the Fig. 13 arrangement, wireless LAN base station 12A is located in the same room A (predetermined location) as wireless terminal 11A, and wireless LAN base station 12A is located in the same room B (predetermined location) as wireless terminal 11B.
wherein each of the wireless LAN base stations is respectively connected to the internet via a corresponding gateway and a corresponding access line connected to the gateway,	In the Fig. 13 arrangement wireless LAN base station 12A is connected to the Internet via the corresponding gateway 21A and a corresponding access line A, and LAN base station 12B is connected to the Internet via the

<p>wherein the wireless LAN base stations, wireless terminals and gateway are arranged to measure a communication speed from each of the wireless terminals to the internet through each of the sub-plurality of wireless LAN base stations to which the wireless terminal is wireless LAN connected,</p> <p>and are arranged to selectively connectively connect the wireless terminals to the internet through the gateway and through the wireless LAN base station of the sub-plurality of wireless LAN base stations having the highest measured communication speed,</p>	<p>corresponding gateway 21B and a corresponding access line B.</p> <p>The Fig. 9 example wireless terminals 11A and 11B within the Fig. 13 arrangement have an application part 131, a base station detecting part 132 and communication control part 134, which send and receive dummy data to perform a speed measurement from each of the wireless terminals to the Internet, through each of the plurality of wireless LAN base stations to which the Fig. 9 wireless terminals are connected. See Specification at, for example, page 40, lines 10-17; and at page 43, lines 15, through page 44, line 8.</p> <p>See Specification at, for example, page 44, lines 9-20.</p>
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<p>a charging server, connected to the common gateway,</p> <p>arranged to record a communication band usage for each of the terminals indicating a quantity of communications between each of the terminals and the internet, based on the unique location identifiers within the communications,</p> <p>arranged to generate a communication fee data unique to each of the wireless terminals, based on a ratio of the recorded communication band usage for the wireless terminal associated with the data to a total of the recorded communication band usage of all of the wireless terminals.</p>	<p>Fig. 13 shows an example charging server 4 connected to the example plurality of gateways 12A and 12B.</p> <p>Fig. 7 shows an example arrangement of the Fig. 13 charging server 4, having an authentication request/gate managing part 413 that stores a table, as shown at Fig. 4, recording a communication band usage between each of the terminals and the internet, based on the terminals' respective MAC address (which is within their communications) and a room identifier associated with the MAC address. Specification further describes an example at page 45, lines 8-18, and at page 46, line 26, through page 47, line 21.</p> <p>The Fig. 7 charging server 4 arrangement as described in the Specification at, for example, page 48, lines 4-9, an arrangement maintaining in its authentication request/gate managing part 413 a table 75 generating and storing a communication fee unique to each terminal based on the running ratio</p>
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	(described as stored in table 74) of bandwidth usage by the terminal to the total bandwidth usage by all of the registered terminals.
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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are as follows:

1. Claims 1, 9, 13-15 and 17 being rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2003/0200439 (“Moskowitz”), in view of U.S. Patent No. 5,987,430 (“Van Horne”), in further view of what the Office Action identifies as “what is well known in the art.” Final Rejection, at pp. 3-5.
2. Claims 7, 11 and 16 being rejected under 35 U.S.C. § 103(a) as being unpatentable over Moskowitz, in view of Van Horne, in view of U.S. Publication No. 2006/0239254 (“Short”), in further view of what the Office Action identifies as “what is well known in the networking art.” Final Rejection, at pp. 6-7.

ARGUMENT VIIA. REJECTIONS UNDER 35 U.S.C. §112, FIRST PARAGRAPH

There are no rejections under 35 U.S.C. §112, first paragraph.

ARGUMENT VIIB. REJECTIONS UNDER 35 U.S.C. §112, SECOND PARAGRAPH

There are no rejections under 35 U.S.C. §112, second paragraph.

Regarding the rejection of claim 16 set forth by the Final Office Action, Appellant's undersigned counsel and the Examiner concluded a telephonic interview on April 29, 2008 with agreement that the Examiner will mail a Supplemental Advisory Action stating that upon entry of Appellant's amendment filed January 8, 2008, identified hereinabove at Section V, *supra*, the Examiner will withdraw the Final Office Action's rejection of claim 16 under 35 U.S.C. § 112, second paragraph.

ARGUMENT VIIC. REJECTIONS UNDER 35 U.S.C. § 102

There are no rejections under 35 U.S.C. § 102.

ARGUMENT VIID. REJECTIONS UNDER 35 U.S.C. § 103**A. Claims 1, 9, 13-15 and 17**

The rejection of claims 1, 9, 13-15 and 17 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2003/0200439 (“Moskowitz”), in view of U.S. Patent No. 5,987,430 (“Van Horne”), in further view of contentions by the Examiner of “what is well known in the art,” Office Action at p. 4, is based on clear error by the Examiner.

Claims 1, 9 and 13 are independent. Each of these claims defines a system having, in combination with other elements, a plurality of terminals connected to the Internet through common gateway or plurality of gateways, with either the gateway (claims 1 and 9) or a charging server (claim 13) arranged to record the amount of communication band usage by each terminal, in association with a location identifier included in communications generated by each terminal, and the gateway or charging server arranged to generate a bill unique for each terminal based on the ratio of the amount of band usage recorded for that terminal’s communications with the Internet to the total amount of band usage recorded for all of the terminals.

The primary reference, Moskowitz, describes a market-based scheme of selling different levels of packet pre-paid priority rights, the purchaser of the priority right obtaining a “watermark” with the purchase that identifies the priority level that was purchased, which the purchaser appends to packets he or she transmits. According to Moskowitz’s described scheme, routers in the Internet inspect each packet’s watermark and then proceed to rout the packet according to the priority represented by the watermark. According to Moskowitz’s description, this allows users to pre-pay for different qualities of service (QoS).

1. Independent Claim 1

The Examiner rejections claim 1, in part, on the Examiner’s statement that Moskowitz at paragraph 15 discloses subject matter meeting the claim 1

limitation of the gateway being “arranged to record a communication band usage for each of the terminals indicating a quantity of communications through the [gateway].” Final Office Action at p. 4.

The Examiner’s statement, however, is not supported by any subject matter found in Moskowitz’s disclosure – neither at paragraph 15 nor anywhere else in the reference.

Stated differently, Moskowitz does not disclose subject matter within the plain, broadest reasonable meaning of a gateway arranged to record Internet bandwidth usage by a terminal.

Moskowitz at paragraph 15 instead discloses valuing and trading a right to future bandwidth usage at a specified priority. Valuing and trading rights to future bandwidth usage is not within the plain meaning, i.e., the broadest reasonable meaning of anything, much less a gateway, arranged to record internet bandwidth usage by a user or by a terminal.

The Examiner further constructs the rejection of claim 1 on the Examiner’s statement that Moskowitz at paragraph 15 discloses subject matter meeting the claim 1 limitation of the gateway being arranged to “generate a communication fee data unique to each terminal.” Final Office Action at p. 4.

The Examiner’s statement regarding Moskowitz “generating a communication fee unique to each terminal”, however, is not supported by Moskowitz’s disclosure.

As Appellant submits above, Moskowitz at paragraph 15 discloses valuing and trading a right to future bandwidth usage at a specified priority. Valuing and trading rights to future bandwidth usage is not subject matter within the plain meaning, i.e., the broadest reasonable meaning of “generat[ing] a communication fee data unique to each terminal.”

The Examiner further presents the rejection of claim 1 on the Examiner’s additional statements which, to the fullest extent these are understood by Appellant, reflect a position by the Examiner that Moskowitz at paragraphs 78 and 86 suggests generating a fee unique to each terminal based on a ratio of

that terminal's bandwidth usage to the total recorded bandwidth usage by all registered of a plurality of terminals. *See* Final Office Action at pp. 4-5. *See also* Advisory Action at p. 2, at which the Examiner states that Moskowitz discloses a "convenience premium" and, at paragraph 86, that "the accounting of the bandwidth used should not exceed the value of the bandwidth provided."

With all due respect to the Examiner, Appellant cannot identify subject matter within Moskowitz's paragraphs 78 and/or 86, or anywhere within Moskowitz, that supports the Examiner's position of record that this reference suggests generating a fee unique to each terminal based on a ratio of that terminal's bandwidth usage to the total recorded bandwidth usage by all registered of a plurality of terminals.

Moskowitz describes selling different levels of packet pre-paid priority rights, the purchaser obtaining a "watermark" identifying the priority level that was purchased, which the purchaser appends to packets he or she transmits. According to Moskowitz, routers in the Internet then inspect each packet's watermark, and rout the packet according to the priority reflected by the watermark. According to Moskowitz's, this allows users to pre-pay for different qualities of service (QoS).

Moskowitz in fact discloses nothing suggesting, or otherwise arguable as objective evidence of obviousness to a person of ordinary skill in the art, of modifying Moskowitz toward Appellant's claim 1.

Moskowitz lacks a gateway arranged to record a terminal's bandwidth usage and lacks a gateway arranged to generate a fee unique to each terminal based on a ratio of that terminal's bandwidth usage to the total recorded bandwidth usage by all registered of a plurality of terminals.

Moskowitz's disclosed "convenience premium" would be understood by a person of ordinary skill in the art pertaining to the invention to be an economic premium a user is willing to pay for the right to transfer, in the future, at a given time specification, over and above the cost to the network of having a dynamic bandwidth allocation that will enable the network to meet that same

transfer time specification established by pre-purchasing, and pre-allocating the transfer rights.

Moskowitz's "convenience premium" is not disclosure of subject matter that would be understood by a person of ordinary skill in the arts pertaining to the invention as being within the plain, broadest reasonable meaning of a fee based on any ratio of any terminal's or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

Regarding Moskowitz at paragraph 86, Appellant submits that Moskowitz discloses subject matter that would be understood by a person or ordinary skill in the art as a supply-and-demand costing, such that economics would justify the cost to the user for purchasing the future priority right.

Again, with all due respect to the Examiner, Appellant cannot identify subject matter within Moskowitz's paragraphs 78 and/or 86, or anywhere within Moskowitz, that is reasonably arguable as evidence of obviousness to a person of ordinary skill in the art to modify Moskowitz to generating a fee unique to, or uniquely associated with, any terminal or user, based on any ratio of any terminal's or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

The difference between Moskowitz and Appellant's claim 1 is therefore that Moskowitz lacks the gateway arrangement to record a bandwidth usage by each of a plurality of terminals, and lacks the gateway arrangement to generate a fee unique for each of plurality of terminals, based on any ratio of any terminal's or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

The secondary reference, Van Horne, adds nothing to Moskowitz with respect to claim 1.

Van Horne is not cited by the Examiner as a teaching of a gateway arrangement to record a bandwidth usage by each of plurality of terminals, and is not cited by the Examiner as a teaching of a gateway arrangement to

generate a fee unique for each of plurality of terminals, based on any ratio of any terminal's or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

The Examiner cites Van Horne only as a teaching of connecting a terminal to the Internet through a gateway. Final Office Action at p. 6.

Van Horne therefore adds nothing that cures the deficiencies of Moskowitz compared to Appellant's claim 1. Stated differently, the scope and content of the prior art represented by Moskowitz and Van Horne, in relation to Appellant's claim 1, is no closer to the claim than Moskowitz standing alone.

The collected teachings of Moskowitz and Van Horne show nothing that is arguable as objective evidence of obviousness to a person of ordinary skill in the art to modify Moskowitz to record a terminal's bandwidth usage, or to modify Moskowitz to generate a fee unique to, or uniquely associated with, any terminal or user, based on any ratio of any terminal's or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

Appellant submits that the collected teachings Moskowitz and Van Horne fail to support any rationale for combining and modifying their respective disclosures to meet claim 1 that is listed under the MPEP § 2141 guidelines for combining and modifying art under *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740 (2007).

The collected teachings of Moskowitz and Van Horne lack "[s]ome teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify ... [or] combine" their respective "teachings to arrive at the claimed invention," MPEP § 2141(III)(G).

Moskowitz describes selling different levels of packet pre-paid, future priority rights, appending corresponding "watermarks," and configuring routers to rout the packet according to the priority reflected by the watermark. Van Horne discloses connecting a terminal to the Internet through a gateway. The

collected teachings of Moskowitz and Van Horne lack any “teaching, suggestion, or motivation ... [to] arrives at the claimed invention.” MPEP § 2141(III)(G).

The collected teachings of Moskowitz and Van Horne fail to support the MPEP § 2141(III)(A) rationale of “combining prior art elements according to known methods to yield predictable results” cannot be used because Moskowitz and Van Horne lack elements of claim 1, and because they show nothing of “known methods” for combining what they do not disclose.

The MPEP § 2141(III)(B) listed rationale of “[s]imple substitution of one known element for another to obtain predictable results” cannot be used because Moskowitz and Van Horne lack elements of claim 1, and because they evidence nothing of any simple substitution into one another of the subject matter that they collectively lack.

The MPEP § 2141(III)(C) listed rationale of “[u]se of known technique to improve similar devices (methods, or products) in the same way” cannot be used, because Moskowitz and Van Horne collectively show nothing of a known technique to improve their respective and collective disclosures to achieve claim 1.

Moskowitz and Van Horne lack subject matter sufficient to support a rationale of “[a]pplying a known technique to a known device (method, or product) ready for improvement to yield predictable results.” MPEP § 2141(III)(D). Nothing in Moskowitz is shown as “ready for improvement” in a direction toward claim 1 that “yield[s] predictable results.

Moskowitz and Van Horne lack subject matter sufficient to support a rationale of “[o]bvious to try - choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success,” MPEP § 2141(III)(E), as there are no “finite number of identified, predictable solutions, with a reasonable expectation of success,” in a direction toward claim 1, that are within their collected teachings

The collected teachings of Moskowitz and Van Horne fail to support a rationale of “[k]nown work ... [that] may prompt variation... based on design

incentives or other market forces if the variations are predictable to one of ordinary skill in the art,” MPEP § 2141(III)(F). Appellant respectfully submits Moskowitz and Van Horne lack “design incentives” or “market forces” that would prompt, or otherwise make obvious to a person of ordinary skill in the art, modifying their collected teachings to achieve claim 1.

Appellant therefore respectfully requests the rejection of claim 1 be reversed.

2. Independent Claim 9

Regarding claim 9, the Examiner constructs substantially the same rejection on Moskowitz, Van Horne and “what is known in the art” as the Examiner constructs in the rejection of claim 1, with an additional reliance on Van Horne as a teaching of a wireless terminal and a wireless LAN base station. *See* Final Office Action at p. 7.

Regardless of Van Horne teaching wireless terminals and base station, though, the fact remains that the collective disclosures of Moskowitz and Van Horne have no teaching or suggestion toward the claim 9 gateway arranged to record a bandwidth usage by each of plurality of terminals remains,.

Further, and regardless of Van Horne having a teaching of wireless terminals and base stations, the collective disclosures of Moskowitz and Van Horne have no teaching or other disclosure of, and suggestion toward, the claim 9 arrangement of the gateway to generate a fee unique for each of plurality of terminals, based on any ratio of any terminal’s or any user’s recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

Appellant therefore requests the rejection of claim 9 be reversed, for at least the reasons requests above that the rejection of claim 1 be reversed.

3. Independent Claim 13

Claim 13 defines an arrangement having a plurality of gateways and having a charging server

The Examiner constructs the rejection of claim 13, based on Moskowitz, Van Horne and “what is known in the art,” in substantially the same manner as the Examiner constructs rejection of claim 9. *See* Final Office Action at p. 9.

Appellant therefore requests, for at least the reasons Appellant presents hereinabove in support of Appellant’s request the rejection of claims 1 and 9 be reversed, that the rejection of claim 13 be reversed,

Appellant further submits the rejection of claim 13 to be based, in part, on an additional and separate error, which is that the Examiner failed to consider the claim’s defined arrangement of connecting terminals to the Internet through the access line having the highest communication speed.

Appellant therefore requests, on this separate and additional reason, that the rejection of claim 13 be reversed on this separate and additional.

4. Dependent Claims 14, 15 and 17

Appellant requests, for at least the reasons Appellant presents hereinabove in support of Appellant’s request that the rejection of claims 1 be reversed, that the rejection of claims 14, 15 and 17 be reversed.

B. Claims 7, 11 and 16

The rejection of independent claims 7 and 11 and dependent claim 16 under 35 U.S.C. § 103(a) as being unpatentable over Moskowitz, in view of Van Horne, in view of U.S. Publication No. 2006/0239254 (“Short”), in further view of contentions by the Examiner of “what is well known in the networking art,” Office Action at p. 4, is clear error.

1. Independent Claim 7

Claim 7 defines a system having, in combination with other elements, a plurality of terminals connected to the Internet through a plurality gateways, and having a charging server, the charging server arranged to record the amount of communication band usage by each terminal, in association with a location identifier included in communications generated by each terminal, and the charging server arranged to generate a bill unique for each terminal based on the ratio of the amount of band usage recorded for that terminal's communications with the Internet to the total amount of band usage recorded for all of the terminals.

Appellant respectfully submits the Examiner's rejection of claim 7 is constructed on substantially the same errors as the rejection of claim 1.

Moskowitz and Van Horne lack any server, gateway or other communication router arranged to record communication band usage by each of plurality of terminals, and lack any server, gateway or other communication router arranged to generate a fee unique for each of plurality of terminals, based on any ratio of any terminal's or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

Short adds nothing to Moskowitz and Van Horne relating to these limitations. Stated with greater specificity, Short discloses nothing and teaches nothing within the meaning of, or toward recording communication band usage by each of plurality of terminals, and lack any server, gateway or other communication router arranged to the claim 1 arranged to generate a fee unique for each of plurality of terminals, based on any ratio of any terminal's or any user's recorded bandwidth usage with respect to the total recorded bandwidth usage of a plurality of terminals, or users.

Appellant submits that the collected teachings Moskowitz, Van Horne and Short fail, for the same reasons Appellant submits hereinabove with respect

to claim 1, to support any rationale for combining and modifying their respective disclosures to meet claim 7, where the rationale can be found under the MPEP § 2141 guidelines for combining and modifying art under *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740 (2007), or is otherwise supported under the controlling law in view of *KSR, supra*.

Appellant requests, for the foregoing reasons, that the rejection of claim 7 be reversed.

2. Independent Claim 11

Claim 11 defines a system having, in combination with other elements, a plurality of terminals connected to the Internet through a common gateway, the common gateway arranged to record the amount of communication band usage by each terminal, in association with a location identifier included in communications generated by each terminal, and the common gateway arranged to generate a bill unique for each terminal based on the ratio of the amount of band usage recorded for that terminal's communications with the Internet to the total amount of band usage recorded for all of the terminals.

The Examiner constructs the rejection of claim 11, based on Moskowitz, Van Horne and Short in substantially the same manner as the Examiner constructs the rejection of claim 7. *See* Final Office Action at p. 13.

Appellant therefore requests, for at least the reasons Appellant presents hereinabove in support of Appellant's request that the rejection of claims 7 be reversed, that the rejection of claim 11 be reversed.

3. Dependent Claim 16

Claim 16 depends from claim 1. Appellant therefore requests, for at least the reasons Appellant presents hereinabove in support of Appellant's request that the rejection of claims 1 be reversed, that the rejection of claim 16 be reversed.

ARGUMENT VIIE. REJECTION OTHER THAN 35 U.S.C. §§102, 103 AND 112

There are no rejections under statutes other than 35 U.S.C. § § 102, 1-3 and 112.

VIII. CLAIMS APPENDIX

The text of the claims involved in the appeal is:

1. An internet connection system, comprising:
 - a plurality of terminals, each terminal located in a predetermined location, each terminal arranged to generate communications having a location identifier unique to the terminal; and
 - a gateway arranged to receive the communications from the terminals and to selectively connect the terminals to the internet, arranged to record a communication band usage for each of the terminals indicating a quantity of communications through the gateway having the unique location identifier of the terminal, and arranged to generate a communication fee data unique to each terminal, the communication fee data based on a ratio of the recorded communication band usage for the terminal to a total of the recorded communication band usage of all of the plurality of terminals.

7. An internet connection system, comprising:
 - a plurality of gateways, each arranged in a predetermined location, each connected to the internet via an access line associated with the gateway;
 - a terminal located in each of the plurality of predetermined locations, connected to the gateway, each terminal arranged to generate communications having a location identifier unique to the terminal,
 - wherein the plurality of gateways are arranged to detect a communication load through each of the access lines, are arranged to compare the detected communication load of different ones of the access lines and, based on the comparing, to selectively connect the terminals to the internet through the access line having a comparatively lower communication load; and

a charging server connected to the plurality of gateways, arranged to record a communication band usage for each of the terminals reflecting a quantity of communications between each of the terminals and the internet based on the location identifier within the communications, and arranged to generate a communication fee data unique to each terminal, based on a ratio of the recorded communication band usage associated with the terminal to a total of the recorded communication band usage of all of the plurality of terminals.

9. An internet system, comprising:

a plurality of wireless LAN base stations, each located in a corresponding predetermined location;

a wireless terminal located in each of the predetermined locations, each wireless terminal wireless LAN connected to the wireless LAN base station in the same predetermined location and wireless LAN connected to the wireless LAN base station in an adjacent predetermined location, wherein each terminal is arranged to generate communications having a location identifier unique to the terminal; and

a gateway connected to the plurality of wireless LAN base stations, the gateway having an access line connected to the internet,

wherein the wireless LAN base stations, wireless terminals and gateway are arranged to selectively connectively connect each of the wireless terminals to the internet through a selectable one of the wireless LAN base station to which the wireless terminal is wireless LAN connected, and

wherein the gateway is arranged to record a communication band usage for each of the terminals, identifying a quantity of communications between each of the terminals and the internet based on the unique location identifiers with the communications, and is arranged to generate a communication fee data unique to each of the wireless terminals, based on a ratio of the recorded communication band usage for the wireless

terminal associated with the data to a total of the recorded communication band usage of all of the wireless terminals.

11. An internet connection system, wherein:

a plurality of wireless LAN base stations, each located in a corresponding predetermined location;

a wireless terminal located in each of the predetermined locations, each wireless terminal wireless LAN connected to a sub-plurality of the wireless LAN base stations, one of the sub-plurality of wireless LAN base stations located in the same predetermined location as the wireless terminal and the other of the sub-plurality of wireless LAN base stations located in a different location; and

a common gateway connected to the plurality of wireless LAN base stations, the common gateway having an access line connected to the internet,

wherein the wireless LAN base stations, wireless terminals and gateway are arranged to measure a communication speed from each of the wireless terminals to the internet through each of the plurality of wireless LAN base stations to which the wireless terminal is wireless LAN connected, and are arranged to selectively connect the wireless terminals to the internet through the gateway and through the wireless LAN base station of the plurality of wireless LAN base stations having the highest measured communication speed,

and further comprising a charging server, connected to the common gateway, arranged to record a communication band usage for each of the terminals indicating a quantity of communications between the terminal and the internet, based on the unique location identifiers within the communications, and arranged to generate a communication fee data unique to each of the wireless terminals, based on a ratio of the recorded communication band usage for the wireless terminal associated with the

data to a total of the recorded communication band usage of all of the wireless terminals.

13. An internet connection system, comprising:

- a plurality of wireless LAN base stations, each located in a corresponding predetermined location;

- a wireless terminal located in each of the predetermined locations, each wireless terminal wireless LAN connected to a sub-plurality of the wireless LAN base stations, one of the sub-plurality of wireless LAN base stations located in the same predetermined location as the wireless terminal and the other of the sub-plurality of wireless LAN base stations located in a different location,

- wherein each of the wireless LAN base stations is respectively connected to the internet via a corresponding gateway and a corresponding access line connected to the gateway, and

- wherein the wireless LAN base stations, wireless terminals and gateway are arranged to measure a communication speed from each of the wireless terminals to the internet through each of the sub-plurality of wireless LAN base stations to which the wireless terminal is wireless LAN connected, and are arranged to selectively connect the wireless terminals to the internet through the gateway and through the wireless LAN base station of the sub-plurality of wireless LAN base stations having the highest measured communication speed,

- and further comprising a charging server, connected to the common gateway, arranged to record a communication band usage for each of the terminals indicating a quantity of communications between each of the terminals and the internet, based on the unique location identifiers within the communications, and arranged to generate a communication fee data unique to each of the wireless terminals, based on a ratio of the recorded communication band usage for the wireless terminal associated with the

data to a total of the recorded communication band usage of all of the wireless terminals.

14. The internet connection system according to claim 1, wherein the gateway and the terminals are arranged to assign a preset maximum communication speed for each location, and are arranged to detect a communication band sum for each location, representing a sum of communications generated by all terminals associated with the location, and are arranged to set, in response to the detected communication band sum exceeding the maximum communication speed, a communication operation of all of the terminals associated with the location to a waiting state and to resume the communication operation of all of the terminals in the location when the detected communication band sum becomes lower than the maximum communication speed for the location..

15. The internet communication system according to claim 1, wherein the gateway and the terminals are arranged to assign a quantity of communication bands to each of the predetermined locations, and are arranged to re-assign a quantity of the communication bands assigned to a predetermined location to another of the predetermined locations, and are arranged to generate a use fee data based on said re-assigning.

16. The internet communication system according to claim 1, wherein each of the terminals are arranged to include a MAC address and to generate communication reflecting the MAC address, and

wherein the gateway includes a register to store authorized MAC addresses for each of the predetermined locations, and

wherein the gateway is arranged to enable communications between each of the terminals and the internet based on the MAC address of the

communicating terminal being one of the stored authorized MAC addresses,
and

wherein the gateway is arranged to detect and store for each of the predetermined locations the total communication band usage of all the terminals having authorized MAC addresses associated with the location, and to detect and store, for each of the locations, the ratio of the total communication band usage of the terminals having authorized MAC addresses associated with the location to the total communication band usage of all the terminals having authorized MAC addresses associated for any of the locations, whereby distributions of the ratios are used for fee computation.

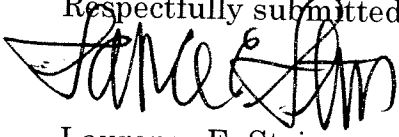
17. The internet communication system of claim 1, wherein the locations are rooms.

IX. EVIDENCE APPENDIX

There is no additional evidence on which Appellant relies in this Appeal.

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings involving this application.

Respectfully submitted,

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